Governor's Office of
Economic Development
Centers of Excellence

Proposals Selected to receive Business Team Support in Preparation for a COE proposal for 2007-08 GOED Board Meeting Nov. 2006

Recommendation Process Meeting Held Oct 26, 2006 Approved by the GOED Board Nov 17, 2006

In the June 2006 GOED Board meeting, the Board approved the recommendation to hold back approximately $75,000 to help fund "pre-proposal" business teams for university teams which want to apply for the next Centers of Excellence funding cycle. The intent of this was to help university teams that want to apply to the COE program by assigning them business team assistance to help them with the business portion of their proposal.

2006-07 Funds Allocated by the Legislature	$3,000,000
2006-07 Direct Center Funding (Technical Funding to Centers)	$ 2,300,069
2006-07 Companion Spinout Funding	$ 135,000
2006-07 Business Team Funding*	**$** 490,000
Funding for 2007-08 pre-proposal Business Teams	**$ 74, 931**

In addition to helping these prospective Centers prepare their proposals, it is the intent of the COE Advisory Council that this pre-proposal business team process will enhance the overall quality and depth of business information available to the COE Advisory Council as they perform their reviews and work through the recommendation process, resulting in ever better funding recommendations.

This is the first time a specific solicitation has been conducted for this purpose. A new solicitation was released on September 7, 2006 and proposals were due October 16, 2006 and this opportunity was communicated to our COE community, and a wide range of contacts at the colleges and universities throughout the state both electronically and through personal visits by the Director. The number of proposals from non-doctoral granting schools (4 out of the 9 submitted) indicates that the message is getting out about modifications made by the legislature last year to encourage participation by these schools with a 1:1 matching funds requirement (instead of the 2:1 matching requirement at the doctoral-granting institutions).

Eleven (11) members of the COE Advisory Council, including GOED Board Member, Mark Howell, and SAC Member, and former SAC Chair, Mike Brehm, participated in the review on October 26, 2006. Of the 9 proposals, 7 were recommended to receive $10,000 in business team assistance. These business team members will be assigned out of the COE program's existing group of business team members and will be responsible for assisting the university team in assessing the economic development potential of their technology and opportunity. These 7 recommendations of $10,000 each total $70,000 out of the nearly $74,931.

In addition, the remaining $4931 was recommended to be allocated for travel expenses for COE participants, with first priority of these funds going to the pre-proposal business teams, particularly to accommodate travel to SUU and CEU, with a secondary priority for use with existing approved Centers and their business teams.

	Proposed	Recommended
Total Number of Proposals for Pre-Proposal Business Team Assistance in preparation for 2006-07	**9**	**7**
Proposals from the University of Utah	**3**	**3**
Proposals from Utah State University	**2**	**2**
Proposals from Southern Utah University (SUU)	**3**	**1**
Proposals from College of Eastern Utah (CEU)	**1**	**1**
For Comparison: 2006-07 Centers with full funding		16
For Comparison: 2006-07 Business Team Centers		5

Pre-Center Candidates Recommended to Receive Business Team Support (University)

Biomolecular Nanophotonics (UU)
Principal Investigator – Keith Roper

Biomolecular Nanophotonics uses chemically engineered micro/nanosystems to dramatically improve the performance of Nucleic Acid Amplification and Detection, one of the key processes used in genetic engineering. The team expects that these improvements can radically improve diagnosis of gene disorders and development of gene therapies, including ribonucleic acid interference (RNAi).

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for Nanopore Sensor Technologies (UU)
Principal Investigator – Henry White; co- Principal Investigators– Eric N. Ervin, Ryan J. White

A nanopore sensor relies on molecule and particle transport through a single conical-shaped pore that is synthesized in a robust glass support (piece of glass). The glass surfaces of the pore interior and exterior can be modified by numerous chemical methods to impart molecular selectivity and high sensitivity in designing sensors for different applications. Essentially these tiny sensors can detect extremely small numbers of molecules of specific compounds which is extremely useful in such applications as DNA sequencing, drug screening, nanoparticle counting and sizing.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for Clean Coke Technology (CEU)
Principal Investigator – Robert Topping

This team, led by the College of Eastern Utah's Western Energy Training Center, aims to commercialize research done in the late 1980's at BYU's Advanced Combustion Engineering Center (ACERC), by bringing together an array of industry and university partners to develop pilot scale concepts in the forming of carbon-containing products from low quality materials, wastes, and fines through a patent-pending product called Clean Coke.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for High End Computer Modeling for Multiphase Chemical Process Optimization (SUU)
Principal Investigator – Nicholas Winowich

Southern Utah University has established a high performance supercomputing facility to enable high fidelity computer modeling of topics of importance to regional industry. The goal of this Center is to partner with a regional pharmaceutical business to develop a 3-dimensional model of a fluidized bed reactor to help optimize their multiphase production processes using computational fluid dynamics. Obviously of interest is to determine if such modeling could be expanded from a single partner to broader applications.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for High Speed Machining (USU)
Principal Investigator - Ning Fang

The goal is to commercialize a software package to assist manufacturers in using new high-speed machining techniques. This software depends upon past and ongoing efforts develop fundamental mechanics models for the high speed machining environment. This will be of value both to Utah's manufacturing industry as well as the potential to create a software product or business.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for Intelligent Service Coordination (USU)
Principal Investigator – Supratik Mukhopadhyay

The technology industry faces a challenge as new sensor and device networks arrive is how to manage the appropriate level of service for a given piece of information. Some information must be in "real time", other information can tolerate delays and variances in arrival time. The Center for Intelligent Service Co-ordination will develop new techniques and architectures for intelligent on-demand co-ordination of service delivering and service-receiving entities in heterogeneous networks connected through wired/wireless networks.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.

Center for Management of Exploratory Workflows (UU)
Principal Investigator - Juliana Freire;

VisTrails is a new "workflow management system" that provides support for data exploration and visualization for tasks that have very little repetition, in contrast with traditional workflow products. Some example tasks that are suitable for this new system include: calibrating simulations for hedge funds, for locating oil wells and radiation treatment planning.

VisTrails is at the forefront of workflow management technology and the new functionalities it provides are badly needed in exploratory tasks that use workflows. A substantial, well-tested code base has been developed. The proposed Center aims to improve the code base so that it can be commercialized and licensed.

Recommendation for $10,000 to fund Business Team assistance for the upcoming proposal year.